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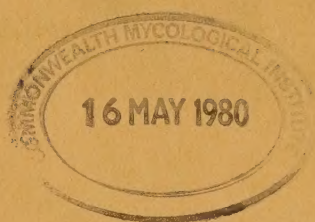
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SUBJECT INDEX

The subject indexes of the *Review of Applied Entomology* not only provide for detailed manual searches under a wide variety of headings, but also provide a wide variety of standardised terms for use in computer-assisted searches of the CAB database. The most detailed entries are those under the names of arthropods, but other organisms, countries, chemicals, habitats and general subjects (e.g. Biological control; Drainage; Light-traps; Subject reviews) are also used as headings. Index headings are not selected from any one thesaurus, but fairly strict vocabulary control is achieved by careful checking of systematic names of organisms and chemicals, by adhering to CAB standards for pest-control chemicals and pharmaceuticals, and by selecting most other index headings to conform with other CAB abstracting journals or with *Chemical Abstracts* or *Index Medicus*. All references are to abstract numbers.

Under the names of arthropods there are references to their control, distribution, hosts, natural enemies, taxonomy, vector ability, and miscellaneous subjects. Entries for species will be found under the generic name, and there are also inverted names with the specific and subspecific epithets placed first. The names used for arthropods in this index are those used in the abstracts, because these names have all been checked against the card indexes maintained by the Institute. These card indexes are continuously updated to take account of taxonomic revisions, and in cases of difficulty the taxonomists employed by the Institute or by the British Museum (Natural History) are consulted. If two or more names are accepted by the *Review* for a taxon during one year, each name is entered separately, with a 'see also' cross-reference to other names. Cross-references from names used by authors but not accepted by the *Review* are given to the currently-accepted names.

Animals other than arthropods are indexed to specific level only, under English common names for the more important domesticated birds and mammals or under scientific names. At both these types of heading will be found references to the arthropods that affect the animal concerned, to arthropod-transmitted pathogens, and to the side-effects of pesticides. Cross-references are given between common names (sometimes inverted) and scientific names.

Pathogens of animals other than arthropods are indexed under the names of the pathogen, the scientific name if one is available, or else the English common name. Some entries will also be found at the names of diseases (sometimes inverted). Viruses pathogenic for arthropods are indexed under the name of the host, and the hosts are listed at the heading 'Viruses and virus diseases'. Other pathogens of arthropods are indexed under the scientific name of the pathogen. As an aid to locating all the information concerning protozoans and helminths, an entry has been made for each relevant abstract at the name of either a phylum or a class.

Geographical locations are keyworded, as appropriate, to faunal regions, continents, countries, archipelagoes or islands, and (for Australia, Canada and the USA), to States, Provinces or Territories. The subheadings refer mainly to pest arthropods, with some references to pest control and diseases.

Chemicals are normally indexed under either a common name or a systematic name, but a few unidentified or complex substances are indexed under names used by authors. The majority of the common names used for chemicals for the control of arthropod pests are listed on pp. 1-11 of *RAE* volume 64, and in addition, other common names stated in the 5th. edition of the *Pesticide Manual* (noticed in *RAE/B* 65, 2031) to have been adopted by BSI, ISO or ANSI are now used. Common names of herbicides and plant growth regulators listed in recent issues of *Weed Abstracts* are now used in *RAE*, and so are the common names of other pesticides (including anthelmintics, fungicides and rodenticides) given in the *Pesticide Manual*. International Nonproprietary Names approved by the World Health Organization are also now used in *RAE*. Most substances without approved common names are indexed under the names used in the indexes of *Chemical Abstracts* volumes 86-95. Cross-references are provided to these inverted systematic names, and in some cases synonyms are given with the entries. Cross-references are also provided from inverted systematic names to many of the common names, and definitions are printed at these headings.

Medical, immunological and veterinary headings are normally selected from either *Medical Subject Headings* or *Veterinary Subject Headings*.

Habitat headings are chosen, whenever possible, beginning with either the name of a vertebrate (e.g. Fowl houses; Pig sties) or of a crop (e.g. Lucerne fields; Rice-fields), though most appropriate stands of trees are indexed under 'Forests' or 'Woodland'. In most other cases, inverted names are selected as headings (e.g. Lakes, recreational; Pastures, irrigated; Swamps, cedar). Subheadings are mostly concerned with the distribution of arthropods and the non-target effects of pest control.

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- Annual reports (1974-75)**, Federal Department of Veterinary Research, Nigeria 1194
- Annual reports (1976-77)**, BIOTROP, Indonesia 267
- Annual reports (1977)**
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- Annual reports (1977-78)**
CSIRO 1174
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- Annual reports (1978)**
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- Aedes aegypti* 1745
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- Stomoxys calcitrans*, on cattle 420
- Culex pipiens* 571

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- Culex pipiens* 571
- Chironomidae, in man-made lakes 1294
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- Blattella germanica* 2346
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- Periplaneta americana* 2832

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- 2-methyl-4-oxo-3-(2-propenyl)-2-cyclopenten-1-yl ester (see Allethrin)
- (3-phenoxyphenyl)methyl ester (see Phenothrin)

- [5-(phenylmethyl)-3-furanyl]methyl ester (see Resmethrin)
- [5-(phenylmethyl)-3-furanyl]methyl ester, (1R-cis)- (see Cismethrin)

- Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-** *contd.*
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Reviews contd.

- Bailly, R.; Dubois, G., Phytosanitary index. Insecticidal, fungicidal, herbicidal . . . products (ed. 15) [Fr] 1153
- Boch, J.; Supperer, R., Veterinary-medical parasitology (ed. 2) [De] 260
- Bram, R.A., Surveillance and collection of arthropods of veterinary importance [En] 2590
- Bram, R.A. (Compiler), Surveillance and collection of arthropods of veterinary importance [En] 270
- Brown, A.W.A., Ecology of pesticides [En] 240
- Central Veterinary Laboratory, A guide to veterinary pesticides [En] 241
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- Cordellier, R.; Germain, M.; Hervy, J.P.; Mouchet, J.
 - A practical guide to the study of the vectors of yellow fever in Africa and methods of control [Fr] 803
 - Practical guide for the study of vectors of yellow fever in Africa, and control methods [Fr] 1229
- Cordero del Campillo, M., *et al.*, Index-catalogue of Iberian zooparasites. V. Acanthocephala. VI. Annelida. VII. Crustacea. VIII. Mallophaga [Es] 982
- Cremlyn, R., Pesticides. Preparation and mode of action [En] 2573
- Daly, H.V.; Doyen, J.T.; Ehrlich, P.R., Introduction to insect biology and diversity [En] 2118
- Donaldson, R.J. (Editor), Parasites and western man [En] 2825
- Dubinina, E.V.; Pletnev, B.D., Methods of detecting and determining allergenic mites of house-dust [Ru] 1983
- Ezell, W.B., Jr. (Editor), An investigation of physical, chemical, and/or biological control of mosquitoes in dredged material disposal areas [En] 1538
- Fairchild, E.J. (Editor), Agricultural chemicals and pesticides. A handbook of the toxic effects [En] 1331
- Fiennes, R.N. T.-W., Zoonoses and the origins and ecology of human disease [En] 2371
- Fröhlich, G.; Beyer, R.; Kleiner, E.M., Dictionaries of biology.
 - Phytopathology and plant protection [De] 2363
- Gozmány, L.; Steinmann, H.; Szily, E., Seven-language dictionary of the names of European animals [La] 2114
- Gregg, C.T., Plague! The shocking story of a dread disease in America today [En] 1416
- Harrison, G., Mosquitoes, malaria and man: a history of the hostilities since 1880 [En] 363
- Herting, B.; Simmonds, F.J., A catalogue of parasites and predators of terrestrial arthropods. Section A. Host or prey/enemy. Volume V. Neuroptera, Diptera, Siphonaptera [En] 301
- Hill, D.S.; Cheung, W.W.K., Hong Kong insects [En] 763
- Hill, I.R.; Wright, S.J.L. (Editors), Pesticide microbiology [En] 2575
- Hofstad, M.S. *et al.* (Editors), Diseases of poultry (ed. 7) [En] 2117
- Kean, B.H.; Mott, K.E.; Russell, A.J. (Editors), Tropical Medicine and Parasitology. Classical investigations (vol. I) [En] 1766
- Killick-Kendrick, R.; Peters, W. (Editors), Rodent malaria [En] 597
- Krantz, G.W., A manual of acarology (ed. 2) [En] 1946
- Krebs, J.R.; Davies, N.B. (Editors), Behavioural ecology. An evolutionary approach [En] 1746
- Kreier, J.P. (Editor)
 - Parasitic protozoa. Volume I [En] 9
 - Parasitic protozoa. Volume III [En] 10

Reviews contd.

- Kreier, J.P. (Editor) *contd.*
 - Parasitic protozoa. Volume IV [En] 11
- Martin, J.E.H. (Compiler), The insects and arachnids of Canada. Part 1. Collecting, preparing and preserving insects, mites, and spiders [En] 744
- Martins, A.A.; Williams, P.; Lima Falcão, A., American sand flies (Diptera: Psychodidae, Phlebotominae) [En] 628
- Matthews, G.A., Pesticide application methods [En] 2016
- Matthews, R.W.; Matthews, J.R., Insect behavior [En] 956
- Mercer, S.L. (Compiler), PANS pesticide index (1979 ed.) [En] 1741
- Mittler, T.E.; Radovsky, F.J.; Resh, V.H. (Editors), Annual Review of Entomology (vol 24) [En] 2350
- Moreau, C.; Bouron, H.; Kern, L.; Bailly, R., French regulations concerning phytosanitary products (ed. 2) [Fr] 1151
- Neal, J.W. (Editor), Guidelines for the control of insect and mite pests of foods, fibers, feeds, ornamentals, livestock, forests, and forest products [En] 2591
- Orkin, M.; Maibach, H.I.; Parish, L.C.; Schwartzman, R.M. (Editors), Scabies and pediculosis [En] 2002
- Reynolds, I.F. (Editor), Pesticides. Synonyms and chemical names (ed. 4) [En] 1740
- Richards, O.W., The social wasps of the Americas excluding the Vespinae [En] 182
- Richards, O.W.; Davies, R.G., Imms' outlines of entomology (ed. 6) [En] 965
- Rockstein, M. (Editor), Biochemistry of insects [En] 271
- Romasheva, L.F. (Editor), Biological methods of control of blood-sucking insects and Acarina [Ru] 2096
- Southcott, R.V., Australian harmful arachnids and their allies [En] 1115
- Stubbs, A.; Chandler, P. (Editors), A dipterist's handbook [En] 2170
- Sutherland, D.W.S., Common names of insects and related organisms (1978 revision) [En] 2593
- Taky, J.; Leatherdale, D.; Sparkes, B., Canadian agricultural thesaurus [En, Fr] 503
- Tipton, V.J. (Editor), Syllabus. Introductory entomology [En] 3106
- Wiesner, E.; Ribbeck, R. (Editors), Glossary of veterinary medicine [De] 1382
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